

GRAVELLY SANDY LOAM
RANGE SITE DESCRIPTION
PE 38-48

Land Resource Area Central Basin

Location Llano, Mason, Fredericksburg, Brady

Date 1-5-87

1. TOPOGRAPHY AND ELEVATION: This site occurs on nearly level to gently undulating upland areas. Slopes are generally 0 to 5 percent. Elevations are 1000 to 1500 feet.

2. SOILS:

- a. This site consists of gravelly sandy loam soils, containing weathered granite gravels. These soils are slowly permeable and are underlain by weathered granite below 40 inches. Production is moderate due to a moderate water storage capacity and a medium fertility. These soils warm up early permitting early spring growth.
- b. Soil taxonomic units which characterize this site are:
- Voca gravelly sandy loam
- c. Specific site location:

3. CLIMAX VEGETATION:

- a. The climax plant community is oak savannah. The understory is dominated by tall and mid grasses such as little bluestem, sideoats grama, Arizona cottontop, pinhole bluestem, and purpletop. Annual forbs are generally present.

<u>RELATIVE PERCENTAGE</u>			
Grasses	85%	Woody	5%
Little bluestem	30%	Post oak	5%
Indiangrass	5%	Live oak	
		Bumelia	
Sideoats grama	20%		
Purpletop	15%		Engelmann daisy
Arizona cottontop			Sensitive briar
Canada wildrye			Velvet bundleflower
Plains bristlegrass			Western indigo
Green sprangletop			
Fringeleaf paspalum	15%		Western ragweed
Fall witchgrass			Bluebonnets
Hooded windmillgrass			Indian paintbrush
Hairy grama			Croton
Threeawn			Annuals

- b. As retrogression occurs, mesquite, Texas persimmon, catclaw, yucca and whitebrush may form a dense canopy. As the site declines, hooded windmillgrass, grassbur, threeawn, western ragweed, bluebonnets, and annuals invade.
- c. Approximate total annual yield of this site in excellent condition ranges from 1500 pounds in poor years to 3500 pounds in good years of air dry vegetation per acre.
4. WILDLIFE NATIVE TO THE SITE: This site is used by deer, squirrel, dove, quail, and turkey. Several of the woody plants, forbs and grasses which grow on the site provide good cover, browse, mast and seeds for game birds and animals.
5. GUIDE TO INITIAL STOCKING RATE:

a. <u>Condition Class</u>	<u>Climax Vegetation</u>	<u>Ac/AU/Yearlong</u>
Excellent	76 - 100	11 - 16
Good	51 - 75	14 - 18
Fair	26 - 50	17 - 21
Poor	0 - 25	20 - 25

- b. Seeded Native and Introduced Species:

Species	<u>Percent Stand Ac/A.U.</u>			
	<u>100-76</u>	<u>75-51</u>	<u>50-26</u>	<u>26-0</u>
Kleingrass	10 - 14	13 - 16	15 - 22	22+
Old World bluestem	10 - 14	13 - 16	15 - 22	22+
K. R. bluestem	12 - 15	14 - 18	17 - 23	23+

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. Cattle

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Little bluestem	Pinhole bluestem	Texas grama
Indiangrass	Bristlegrass	Signalgrass
Arizona cottontop	Texas wintergrass	Hairy grama
Sand lovegrass	Buffalograss and curlymesquite	Gummy lovegrass and tumble lovegrass
Sideoats grama		
Purpletop	Tall dropseed	Annual forbs
	Fringeleaf paspalum	Halls panicum
	Hooded windmillgrass	

b. Sheep

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Little bluestem	Indiangrass	Red grama
Sideoats grama	Buffalograss and curlymesquite	Texas grama
Arizona cottontop	Fringeleaf paspalum	Threeawn
Louisiana sagewort	Hairy grama	Annual forbs
Engelmann daisy	Sand lovegrass	Mesquite
Orange zexmenia	Purpletop	Oak
Bush sunflower	Hooded windmillgrass	
Wild peach		
Velvet bundleflower		
Sagewort		

c. Goats

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Live oak - post oak	Purpletop	Baccharis
Bumelia	Indiangrass	Tumblegrass
Bundleflower	Sedges	Annual forbs
Sensitivebriar	Sideoats grama	Mesquite
Greenbriar	Arizona cottontop	Red lovegrass
Kidneywood	Little bluestem	Threeawn
Bush sunflower	Fringeleaf paspalum	
Sagewort	Hooded windmillgrass	
Wild peach		

1/ See legend on separate page for definitions of interpretations made for each animal.

d. Deer

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Yaupon	Texas wintergrass	Most grasses
Oak	Whitebrush	Baccharis
Greenbriar	Catclaw	Ragweed
Bundleflower	Sedges	Juniper
Sensitivebriar	Coneflower	Mesquite
Engelmann daisy		
Bush sunflower		
Kidneywood		
Annual forbs		

e. Quail and Dove

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Bundleflower	Other grass seed	Most grasses
Croton seed	Tick clover	Oak (acorns)
Sensitivebriar	Trailing ratany	
Panicum seed	Woody plant seed	
Paspalum seed		
Lovegrasses		
Western ragweed		
Canada wildrye		
Annual grass & weed seed		

f. Turkey

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Grass leaves & seed	Coarse grass	Woody foliage
Annual grass seed		
Canada wildrye		
Forb seed and leaves		
Woody plant seed		

Legend and Definitions for Range Site Description.

1/ This rating system provides general guidance as to animal preference for plant species. It also indicates possible competition between kinds of animals for the various plants. Grazing preference changes from time to time and place to place depending upon the animals, upon plant palatability and nutritive value, stage of growth and season of use, relative abundance, and associated plants. Grazing preference does not necessarily reflect a plant's ecological place in the climax plant community.

The following definitions apply to cattle, sheep, goats, deer and antelope grazing.

Primary: These species generally decrease when the climax plant community is subjected to continuous heavy grazing pressure by the animals listed.

Secondary: These plants usually increase initially, then decrease when the site is subjected to continuous heavy grazing use by the animals listed.

Low Value: These plants continue to increase or invade with heavy continuous grazing use of the site.

For squirrel, peccary and birds the terms primary, secondary, and low value indicate species preference only. They do not indicate plant response to feeding pressure, nor do they have any ecological significance.

APPROVAL *Signature*

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1-23-87

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1-29-87